



# MODERN DRAWING OFFICE

*Major Halford's New  
Gipsy Engine Design  
Office at Stag Lane :  
Staff of Seventy*

**F**EW who meet Major Frank Halford will realise that the youthful designer has been producing aero engines for twenty-two years or so. Not until one begins to discuss the old flying days does one remember that in 1912 or thereabout there was an assistant instructor at the Bristol flying school at Brooklands of that name. Engines were always Halford's great passion, and by 1916 he had become the "H" in the B.H.P. engine, the other two initials representing Beardmore and Pullinger respectively. The B.H.P. developed into the Siddeley Puma, which was an excellent engine for its time.

In 1923 Major Halford started as an independent engine designer, with Mr. J. L. P. Brodie as his "staff." Mr. Brodie has been Major Halford's second-in-command ever since. The first task was to design the Airdisco engine to use as many parts as possible of the old Renault engine. Then followed the Cirrus and Nimbus engines, and afterwards the Gipsy family, Series I, II, III, Major, Six and Twelve. In addition to the Gipsies, of which nearly 6,000 have been built, Major Halford has designed for the Napier company the Rapier, Dagger and Sabre series, all "H"-type engines.

For eight years, from 1929 to 1937, Major Halford had his design office in Golden Square. The volume of work increased to such an extent that it became desirable to bring the design offices and works closer together, and the new offices at Stag Lane were taken into use a few months ago.

The new office building is a red-brick structure of modern appearance, and the offices are planned on modern lines, with the general design office centrally placed in the building and surrounded by the ancillary sections, such as tracing office, blue-print department, and stress department. Below the drawing office is a fireproof and floodproof basement in which the more valuable master drawings are stored.

The drawing office has been carefully lighted and sound-proofed, and each draughtsman keeps his equipment in a mobile trolley, so that if he is moved to another part of the room he just takes his trolley with him. Terry anglepoise



"Flight" photograph

Major Frank B. Halford (right), the designer of the De Havilland Gipsy and Napier "H"-type engines, in his new office at Stag Lane with Mr. Brodie, his second-in-command.

lights are supplied with current from points in the floor, so that there are no unsightly wires. The soundproofing is so effective that a conversation is barely heard a few feet away.



"Flight" photographs

The new drawing office (left) has scientific lighting and sound-proofing. In surrounding offices are the tracers, blue-printing and the stress department (above).